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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,579	10/09/2001	Dominik J. Schmidt		6017
38236	7590	06/21/2005		
DOMINIK J. SCHMIDT P.O. BOX 20541 STANDFORD, CA 94309			EXAMINER LY, ANH VU H	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,579

Applicant(s)

SCHMIDT, DOMINIK J.

Examiner

Anh-Vu H. Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 8, 11, 13-17, and 20 are objected to because of the following informalities:

With respect to claim 1, in lines 13-14, “the reconfigurable multi-processor core” lacks antecedent basis.

With respect to claim 5, in line 3, a period should be inserted at the end of the claim.

With respect to claim 8, in line 2, “the processor” lacks clear antecedent basis. It is unclear what processor being referred to. Further, in lines 2-3, “the cellular radio core” and “the short-range wireless transceiver core” lack antecedent basis.

With respect to claim 11, in lines 3 and 4, “said program storage device” and “said use” lack antecedent basis. Further, in lines 17-18 and 21, “the reconfigurable multi-processor core” and “said user input” lack antecedent basis.

With respect to claims 13-15, in line 1, “wherein the protocol software” lack antecedent basis.

With respect to claims 16 and 17, in lines 1-2, “the reconfigurable processor core” lacks antecedent basis.

With respect to claim 20, in line 2, a period should be inserted at the end of the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sherburne, Jr.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claims 1, 8, 11, and 18, Sherburne discloses in Fig. 5, a block diagram of a single chip wireless communications integrated circuit comprising the analog portion and the digital portion. The analog portion includes antenna, cellular radio core 110, short-range wireless transceiver core 130, link controller 134, and RF 132 (a radio frequency front-end adapted to receive an RF signal from an antenna). Sherburne discloses in page 3, 31st paragraph, that the RF unit 132 includes an RF receiver connected to an ADC (an analog to digital converter coupled to the RF front-end to digitize the RF signal). The digital portion includes the reconfigurable processor core 150 (a reconfigurable logic core coupled to the ADC), router 190, and high-density memory array core 170 (a high density memory array core coupled to the reconfigurable multi-processor core). Sherburne discloses in page 3, 28th paragraph, that the reconfigurable processor core 150 operates with the plurality of distinct and unrelated

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communication standards and protocols (the reconfigurable logic core adapted to handle a plurality of wireless communication protocols). As shown in Fig. 5, the core 150 includes plurality of CPUs 151, DSPs 153, and ASICs 155 (one or more general purpose processor cores coupled to the reconfigurable logic core). Sherburne discloses in Fig. 6, the computer system comprises a processor 220 for providing the processing capability (a processor). The processor 220 is connected to a read-only-memory 221 for receiving executable instructions as well as certain predefined data and variables (a program storage device for storing computer readable code coupled to the processor). Further, the computer 200 receives instructions from the user via one or more switches such as push-button switches in a keypad 224 (a input recognizer embodied in the program storage device, said input recognizer adapted to receive input from the user).

With respect to claims 2 and 12-15, Sherburne discloses in page 3, 28th paragraph, that a plurality of standards and protocols are operable in the device 100 (Fig. 5), e.g., GSM, GPRS, EDGE, Bluetooth, and IEEE802.22 (the protocol conforms to one of a GSM, GPRS, EDGE, and 802.11A protocol).

With respect to claims 3 and 4, Sherburne discloses in Fig. 5 that data can be delivered in parallel or in series to the processors (wherein the reconfigurable logic core delivers data in parallel and/or in series to the general purpose processor cores).

With respect to claim 5, Sherburne discloses in Fig. 2, that FIFO is positioned between the processor and the logic (a FIFO positioned between the reconfigurable logic core and each general purpose processor core).

With respect to claim 6, Sherburne discloses in page 2, 25th paragraph, that the processors can rapidly execute multiply-accumulate and add-compare-subtract instructions (wherein the general purpose processor core includes a multiply-accumulate unit).

With respect to claims 7 and 17, Sherburne discloses in page 5, 44th paragraph, that the processor can be a reduced instruction set computer processor (general purpose processor core comprises a RISC processor).

With respect to claim 9, Sherburne discloses in page 4, 37th paragraph, that the router 190 can send packets in parallel through separate pathways of cellular or Bluetooth. Herein, the router examines the destinations of the packets for the purpose of forwarding (the router comprises an engine that tracks the destinations of packets and send them in parallel through a plurality of separate pathways).

With respect to claim 10, Sherburne discloses in page 4, 37th paragraph, that the router 190 can send some packets in parallel through both the primary and secondary communication channel to make sure some of the packets arrive at their destinations (router sends packets in parallel through a primary and a secondary communication channel).

With respect to claim 16, Sherburne discloses in page 2, 24th paragraph, that the reconfigurable processor core 150 can include one or more MIPS processors and/or DSPs 153 (reconfigurable processor core includes one or more DSPs).

With respect to claims 19 and 20, Sherburne discloses in page 4, 37th paragraph, that the router 190 can send packets in parallel through separate pathways of cellular or Bluetooth (the router de-correlates data and into parallel streams that are not time-correlated).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schmidt (US Pub 2002/0197998 A1) discloses cellular channel bonding for improved data transmission).

Schmidt (US Pub 2003/0035388 A1) discloses RF sniffer.

Schmidt (US Pub 2003/0058830 A1) discloses channel interference reduction.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2667 6/20/05